

Amendments to the Claims:

This listing will replace all prior versions, and listings, of claims in the application.

Listing of the Claims.

1. (canceled)
2. (currently amended) The electrode of claim ~~[[1]]~~ 64 wherein the framework material is alloyed with an alkali metal.
3. (canceled)
- 4.-7. (canceled)
8. (currently amended) The electrode of claim ~~[[1]]~~ 64, wherein the nanofilm has a thickness of not greater than about 500 nm.
9. (original) The electrode of claim 8, wherein the nanofilm has a thickness of not greater than about 200 nm.
10. (original) The electrode of claim 9, wherein the nanofilm has a thickness of not greater than about 100 nm.
11. (previously presented) The electrode of claim 2, wherein the alkali metal is lithium and the lithium alloy of the nanostructured material has the formula $\text{Li}_x\text{Si}_{(1-z)}\text{Ge}_z$, wherein x is at least about 1.
12. (original) The electrode of claim 11, wherein the lithium alloy of the nanostructured material has the formula $\text{Li}_x\text{Si}_{(1-z)}\text{Ge}_z$, wherein x is at least about 2.5.

13. (currently amended)The electrode of claim [[1]] 64, wherein the nanostructured material has a cycle life that is stable over at least about 10 cycles.
14. (original)The electrode of claim 13, wherein the nanostructured material has a cycle life that is stable over at least about 20 cycles.
15. (currently amended)The electrode of claim [[1]] 64, wherein the nanostructured material exhibits a rate capability of at least about 1C.
16. (canceled)
17. (canceled)
18. (currently amended)The electrode of claim [[1]] 64, wherein the substrate is a current collector and is made from a metal.
19. (withdrawn)A secondary electrochemical cell comprising an anode, a cathode, and an electrolyte, wherein the anode comprises nanostructured material of formula $\text{Si}_{(1-z)}\text{Ge}_z$ or a lithium alloy thereof, wherein $0 < z \leq 1$.
20. (withdrawn)The secondary electrochemical cell of claim 19, wherein the secondary electrochemical cell is an electrochemical supercapacitor.
21. (withdrawn)The secondary electrochemical cell of claim 19, wherein the secondary electrochemical cell is fabricated on an integrated device.
- 22-29 (canceled)
- 30.-40 (canceled)

41.-50. (canceled)

51. (currently amended) The electrode of claim ~~[[1]]~~ 64 wherein z is from 0.5 to 0.75.

52. (currently amended) The electrode of claim ~~[[41]]~~ 64, wherein the ~~nanofilm adheres to a~~ substrate which serves as a current collector.

53. (canceled)

54. (currently amended) The electrode of claim ~~[[41]]~~ 66, where the thickness of the nanofilm is no greater than 500 nm.

55. (canceled)

56.-63.(canceled)

64. (currently amended) ~~The electrode of claim 1,~~ An electrode for a secondary electrochemical cell, the electrode comprising a substrate and a layer of nanostructured framework material which adheres to the substrate, the framework material being in the form of an amorphous nanofilm of silicon-germanium material of formula $\text{Si}_{(1-z)}\text{Ge}_z$, wherein z is from 0.25 to 0.75 and wherein the electrode is the anode of a secondary electrochemical cell comprising an anode, a cathode and an electrolyte ~~containing a lithium salt,~~ the framework material of the electrode being disposed to allow interaction with the electrolyte.

65. (canceled).

66. (currently amended) ~~The electrode of claim 42,~~ An electrode for a secondary electrochemical cell, the electrode comprising an alkali metal alloy of nanostructured silicon-germanium material of formula $\text{Si}_{(1-z)}\text{Ge}_z$ wherein z is from 0.25 to 0.75, the alkali metal alloy being produced by electrochemically alloying an alkali metal with an amorphous nanofilm of the material of formula $\text{Si}_{(1-z)}\text{Ge}_z$ and wherein the electrode is the anode of a secondary electrochemical cell comprising an anode, a cathode and an electrolyte containing a lithium salt, the alkali metal alloy of the electrode nanofilm being disposed to allow interaction with the electrolyte.

67.-68.(canceled)

69. (currently amended)The electrode of claim ~~[[68]]~~ 66 wherein the alkali metal is lithium.

70.-72.(canceled).

73. (new). The electrode of claim 64, wherein the silicon-germanium material is a solid solution of silicon and germanium.

74. (new) The electrode of claim 64, wherein the silicon- germanium material is not homogeneous.

75. (new) The electrode of claim 66, wherein the silicon-germanium material is a solid solution of silicon and germanium.

76. (new) The electrode of claim 66, wherein the silicon-germanium material is not homogenous.

77. (new) The electrode of claim 66, wherein the alkali metal is lithium and the lithium alloy has the formula $\text{Li}_x\text{Si}_{(1-z)}\text{Ge}_z$, wherein x is at least about 1.